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CLAIMS

Paper or cardboard comprising the components of flour in the paper fiber matrix.

- Paper or cardboard according to claim 1, comprising 2. 0.1-8 wt.% starch and 0.3-2.4 wt.% protein in the paper fiber matrix calculated on the weight of the dry substance.
- paper or cardboard according to claim 1 or 2, comprising 2-5 wt.% starch 0.2-1 wt.% protein in the paper fiber matrix.
- Paper or cardboard according to any one of the preceding claims, wherein the components originate from agricultural products, for instance pulses and grains such as pea meal and wheat flour.
- A method for manufacturing paper or cardboard, wherein at least flour is subjected to a treatment known in the paper industry for native starch, after which the treated components of flour are jointly introduced into the paper fiber matrix in one step.
- A method according to claim 5, wherein the flour is 6. treated with a chemical and/or enzymatic starch chain-
- degrading agent and is then introduced into the paper fiber 20 matrix utilizing a size press.
 - A method according to claim 6, wherein the protein fraction of the flour is rendered water-soluble.
- A method for manufacturing paper wherein vegetable material of a high protein and starch content, preferably 25 grain, is processed completely, comprising separating the vegetable material into (a) a fraction substantially consisting of the cellulose material and (b) a fraction substantially consisting of the protein and starch material,
- feeding fraction (a) to the usual fiber mass, and feeding the 30



fraction (b) according to any one of claims 5-7 in a step wherein fiber-reinforcing additives are introduced.

- 9. Use of unseparated flour components in the fiber matrix of paper or cardboard for improving or adjusting the strength properties, stiffness properties, permeability, surface properties and elasticity of the paper.
- 10. Use of unseparated flour components as glue for fixing the corrugations in corrugated cardboard.